

# An Overview of ITIS

*www.itis.gov*

Gerald “Stinger” Guala, Ph.D.

Director of the Integrated Taxonomic  
Information System (ITIS)





# ITIS

## Partners



Smithsonian



**Agricultural Research Service**

*the in-house research arm of the U.S. Department of Agriculture*

**NRCS** Natural Resources Conservation Service

Catalogue of Life



**Species  
2000**



**Agriculture and  
Agri-Food Canada**

**Agriculture et  
Agroalimentaire Canada**



**Conabio**

*Comisión nacional para el conocimiento y uso de la biodiversidad*



**NatureServe**



Encyclopedia of Life



# The ITIS mission

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*to build and maintain a scientifically credible and publicly accessible database of taxonomic data and information on the world's biota, placing priority on the taxa of North America.*





# ITIS

## Key Components

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- **Standard taxonomic reference tool**
  - **dynamic standardized database of biological names & related data (500K+ scientific names and 100K+ common names of importance to N. America and beyond)**
  - **accepted scientific names in single “best” classification, with synonyms, and common names**
  - **multi-lingual interface - English, French, Portuguese, Spanish**
  - **on-line lookup, downloads**
  - **Full taxonomic coverage with regional and global checklists**





# ITIS

## Key Components

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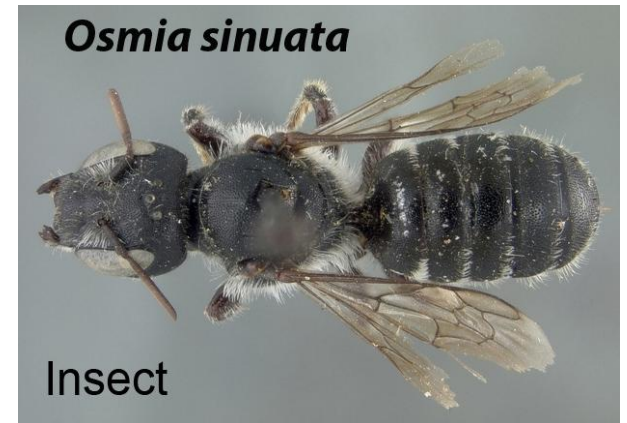
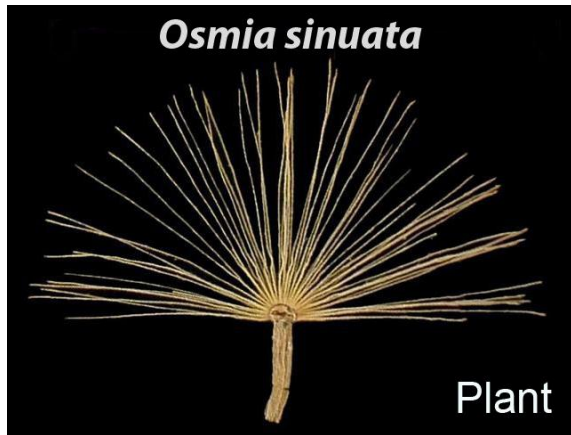
- ❑ **Taxonomic Serial Number (TSN) - unique for each scientific name**
  - **facilitates machine to machine - the TSN is a non-intelligent, unique and stable**
- ❑ **Codes of Nomenclature dictate ITIS business rules**
- ❑ **Rigorous proofing protocols and verification**
- ❑ **Bibliographic/expert link**
  - **steward program insures scientific credibility**
- ❑ **Working tools - Work Bench, TaxCompare, queries**



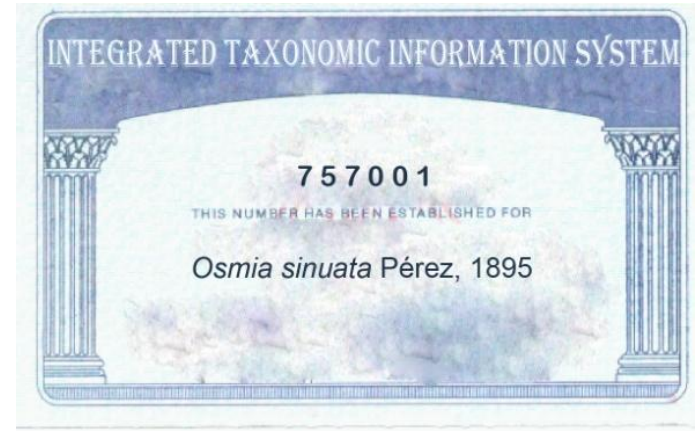
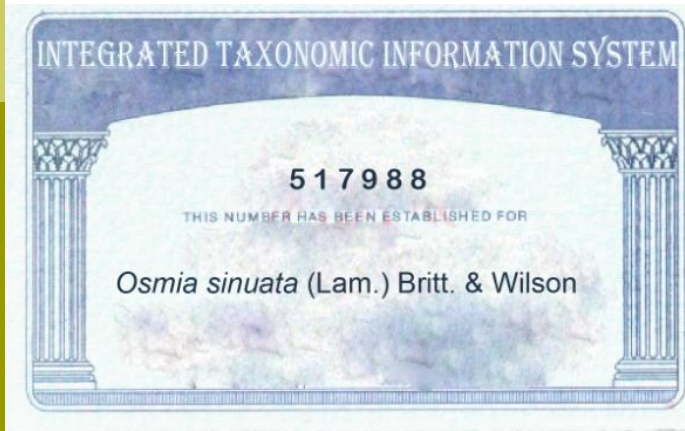




# ITIS



ITIS Taxonomic Serial Numbers are Social Security Numbers  
for Species Names





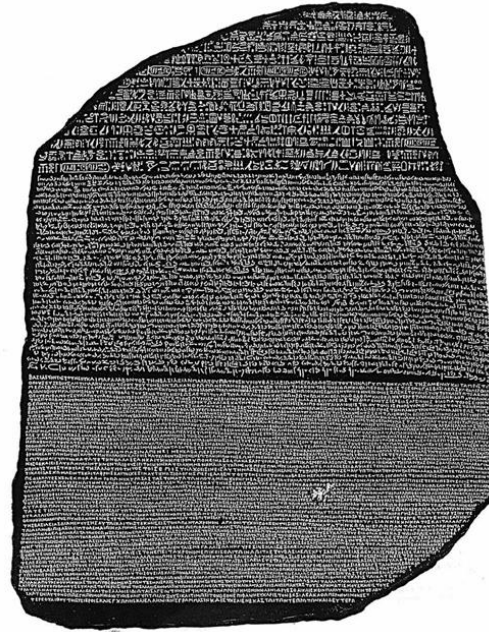
Google scholar

*Marginaria polypodioides*

**With ITIS synonymy**

*Pleopeltis polypodioides*  
*Polypodium polypodioides*

**814 Articles**



ITIS is the Rosetta Stone  
for Species Names



Google scholar

*Marginaria polypodioides*

**15 Articles**







# ITIS

## Classification



[Home](#) [About Data](#) [Data Access](#) [Submit Data](#) [Tools](#) [Comment](#)

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### ***Thunnus alalunga* (Bonnaterre, 1788)**

Taxonomic Serial No.: 172419

[Download data](#) [Download \*Thunnus alalunga\* TSN 172419](#)

#### Taxonomy and Nomenclature

Kingdom: Animalia  
Taxonomic Rank: Species  
Synonym(s): [Scomber alalunga](#) Bonnaterre, 1788  
[Thunnus germon](#) Lacepède, 1801  
Common Name(s): albacora [Spanish]  
albacore [English]  
atún blanco [Spanish]  
germon [French]  
longfinned albacore [English]

#### **Taxonomic Status:**

Current Standing: valid

#### **Data Quality Indicators:**

Record Credibility Rating: verified - standards met

**Names  
Standing  
Quality**

#### Taxonomic Hierarchy

Kingdom [Animalia](#) -- Animal, animals, animaux  
Phylum [Chordata](#) -- chordates, cordado, cordés  
Subphylum [Vertebrata](#) -- vertebrado, vertebrates, vertébrés  
Superclass [Osteichthyes](#) -- bony fishes, osteiceto, peixe ósseo, poissons osseux  
Class [Actinopterygii](#) -- poisson épineux, poissons à nageoires rayonnées, ray-fins  
Subclass [Neopterygii](#) -- neopterygians  
Infraclass [Teleostei](#)  
Superorder [Acanthopterygii](#)  
Order [Perciformes](#) -- perch-like fishes  
Suborder [Scombroidei](#) -- albacores, billfishes, bonites, bonitos, espadons, germons, mackerels, maquereaux, ribbonfishes, sailfishes, swordfishes, thons, tunas, voiliers  
Family [Scombridae](#) -- albacores, bonitos, macarelas, mackerels, maquereaux, tunas  
Subfamily [Scombrinae](#) Bonaparte, 1831  
Tribe [Thunnini](#) Starks, 1910

**Classification**





# ITIS

## References

Tribe	<a href="#">Thunnini</a> Starks, 1910
Genus	<a href="#">Thunnus</a> South, 1845 -- albacores, tunas
Subgenus	<a href="#">Thunnus (Thunnus)</a> South, 1845
Species	<a href="#">Thunnus alalunga</a> (Bonnaterre, 1788) -- albacora, albacore, atún blanco, germon, longfinned albacore

### References

<b>Expert(s):</b> Expert: Notes:	<a href="#">Bruce B. Collette</a> Senior Scientist, National Systematics Laboratory, National Marine Fisheries Service, Smithsonian Institution, National Museum of Natural History, Washington, DC, USA <i>Thunnus alalunga</i>	Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	2001 Systematics of the Tunas and Mackerels (Scombridae) Fish Physiology, vol. 19: Tuna: Physiology, Ecology, and Evolution 1-33 Academic Press San Diego, California, USA 0-12-350443-0 <i>Thunnus alalunga</i>
<b>Other Source(s):</b> Source: Acquired: Notes: Reference for:	<a href="#">Catalog of Fishes, 13-May-2004, website (version 10-May-04)</a> 2004 <a href="http://www.calacademy.org/research/ichthyology/catalog/">http://www.calacademy.org/research/ichthyology/catalog/</a> <i>Thunnus alalunga</i>	Author(s)/Editor(s): Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	<a href="#">Nelson, Joseph S., Edwin J. Crossman, H. Espinosa-Pérez, L. T. Findley, C. R. Gilbert, et al., eds.</a> 2004 Common and scientific names of fishes from the United States, Canada, and Mexico, Sixth Edition American Fisheries Society Special Publication, no. 29 ix + 386 American Fisheries Society Bethesda, Maryland, USA 1-888569-61-1, 0097-0638 Full author list: Nelson, Joseph S., Edwin J. Crossman, Héctor Espinosa-Pérez, Lloyd T. Findley, Carter R. Gilbert, Robert N. Lea, and James D. Williams <i>Thunnus alalunga</i> , albacora, albacore
<b>Publication(s):</b> Author(s)/Editor(s): Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	<a href="#">Claro, Rodolfo, and Lynne R. Parenti / Claro, Rodolfo, Kerwon C. Lindern</a> 2001 Chapter 2: The Marine Ichthyofauna of Cuba Ecology of the Marine Fishes of Cuba 21-57 Smithsonian Institution Press Washington, DC, USA 1-56098-985-8 <i>Thunnus alalunga</i>	Author(s)/Editor(s): Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	<a href="#">Robins, Richard C., Reeve M. Bailey, Carl E. Bond, James R. Brooker, Ernest A. Lachner, et al.</a> 1980 A List of Common and Scientific Names of Fishes from the United States and Canada, Fourth Edition American Fisheries Society Special Publication, no. 12 174 American Fisheries Society Bethesda, Maryland, USA <i>Thunnus alalunga</i>
Author(s)/Editor(s): Publication Date: Article/Chapter Title: Date Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	<a href="#">Collette, Bruce B., and Cornelia E. Nauen</a> 1983 Scombrids of the World: An Annotated and Illustrated Catalogue of Tuna: Date FAO Fisheries Synopsis, no. 125, vol. 2 137 Food and Agriculture Organization of the United Nations Rome, Italy 92-5-101381-0 <i>Thunnus alalunga</i>	Author(s)/Editor(s): Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s): Publisher: Publication Place: ISBN/ISSN: Notes: Reference for:	<a href="#">Robins, Richard C., Reeve M. Bailey, Carl E. Bond, James R. Brooker, Ernest A. Lachner, et al.</a> 1991 Common and Scientific Names of Fishes from the United States and Canada, Fifth Edition American Fisheries Society Special Publication, no. 20 183 American Fisheries Society Bethesda, Maryland, USA 0-913235-70-9, 0097-0638 <i>Thunnus alalunga</i>
Author(s)/Editor(s):	<a href="#">Collette, Bruce B., Carol Reeb, and Barbara A. Block / Barbara A. Block et al.</a>	Author(s)/Editor(s): Publication Date: Article/Chapter Title: Journal/Book Name, Vol. No.: Page(s):	<a href="#">Shino, Sueo M.</a> 1976 List of Common Names of Fishes of the World, Those Prevailing among English-speaking Nations Science Report of Shima Marineland, no. 4 262

# Web Services



## ITIS Web Services

What's New  
About ITIS  
Data Access  
Submit Data  
Tools  
TRED  
Links  
Comments  
Home

The ITIS Web Services provide the ability to search and retrieve data from ITIS by providing access to the data behind the [ITIS web site](#)

This page will be updated in the future with a full description of the web service and all its functionality. It will include:

**Description** - This will list each service function with its description, inputs, outputs, and a sample URL that returns results.

**WSDL** - The Web Service Description Language document that fully describes the ITIS Web Service. This document can be used to create clients that access the service.

All services described in the WSDL are available at  
[http://www.itis.gov/ITISWebService/services/ITISService/name\\_of\\_service](http://www.itis.gov/ITISWebService/services/ITISService/name_of_service)

For example, the description can be accessed at <http://www.itis.gov/ITISWebService/services/ITISService/getDescription>

**Creating a Client** - This will provide coding information for creating a client using Java in a step-by-step approach.





# ITIS

# Online Taxonomic Workbench

File Project Tools

Passerculus Bonaparte, 1838

- Passerculus sandwichensis (Gmelin, 1789)
- [invalid] Ammodramus sandwichensis
- Passerculus sandwichensis beldingi F
- [invalid] Passerculus sandwichensis
- Passerculus sandwichensis guttatus L
- [invalid] Passerculus sandwichensis
- Passerculus sandwichensis princeps F
- Passerculus sandwichensis rostratus (Ca
- [invalid] Passerculus rostratus (Ca
- [invalid] Passerculus sandwichensis
- Passerculus sandwichensis sanctorum
- Passerculus sandwichensis sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis
- [invalid] Passerculus sandwichensis

**Taxon**

Kingdom: Animalia Rank: Species OTWB ID: 179314 TSN: 179314

Hybrid: ☐ Scientific Name: Genus: ☐ Passerculus Species: ☐ sandwichensis

Taxon Author: (Gmelin, 1789) Parentheses

Usage: valid

**Hierarchy**

**Vernacular**

Vernacular Name: Savannah Sparrow Language: English Approved: ☐

Please remember to 'add' or 'modify' to record your changes.

ID	Name	Language	Approved
20207	Savannah Sparrow	English	N
84691	bruant des prés	French	N
80680	Gorrión sabanero	Spanish	N

Add Modify Delete Clear

**Distribution**

Geographic Divisions

☒ North America ☐ Europe & Northern Asia (excluding China) ☐ Antarctica/Southern Ocean

☒ Middle America ☐ Africa ☐ Eastern Atlantic Ocean

☒ Caribbean ☐ Southern Asia ☐ Western Atlantic Ocean

☐ South America ☐ Australia ☐ Indo-West Pacific

☐ Oceania ☐ East Pacific

Jurisdiction

Passerculus (699) Being edited by project team - stage 1 21 names in Animalia You're logged on as David Nicolson [nicolsod]: Smithsonian Institution [Logout](#)





# ITIS

## Major Groups Complete for North America

### *All Plants*



### *Many Invertebrate Groups*



### *All Vertebrates*







# ITIS

## Focus Areas in 2011

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- ❑ Complete update of the Plants
- ❑ CITES
- ❑ Insects (many groups)
- ❑ All Spiders of the World
- ❑ Fungi
- ❑ Worms
- ❑ Mosses, Liverworts & Hornworts





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Questions?